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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/055,989	01/28/2002	Matthias Rebellius	Q67989	2124

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EXAMINER
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AUVE, GLENN ALLEN

ART UNIT	PAPER NUMBER
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2111

DATE MAILED: 01/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/055,989

Applicant(s)

REBELLIOUS ET AL.

Examiner

Glenn A. Auve

Art Unit

2111

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 January 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

**DETAILED ACTION*****Priority***

1. Applicant has filed this application as a continuation of a German PCT application. It is noted that it cannot be determined whether or not the instant application was copending with the PCT application at the time of filing. As set forth in MPEP §1895 applicant must submit sufficient proof of the copending status of the applications in order to gain the benefit of priority.

"If the prior application is an international application, the examiner must ascertain \*>(B)< and \*>(C)< above by either examining the national stage application file of the international application, or by examining the international application file, or requiring applicant to submit sufficient \*>evidence to prove< that the international application was copending with the U.S. national (35 U.S.C. 111(a)) application claiming benefit under 35 U.S.C. 120. **>The evidence submitted to prove that the international application was copending with the U.S. national (35 U.S.C. 111(a)) application should include a certification from applicant that neither the international application nor the designation of the United States was withdrawn or considered to be withdrawn prior to the filing date of the U.S. national (35 U.S.C. 111(a)) application.** Additionally, if the 20 month period from the priority date of the international application expired before April 1, 2002 and the U.S. national (35 U.S.C. 111(a)) application was filed later than 20 months from the priority date of the international application, the evidence should also include proof of filing a demand electing the United States within 19 months from the priority date. **The proof of filing the demand may be in the form of a copy of the "Notification of Receipt of Demand by Competent International Preliminary Examining Authority" (Form PCT/IPEA/402) showing that the demand was received prior to the expiration of 19 months from the priority date, and a copy of the "Notification Concerning Elected Offices Notified of Their Election" (Form PCT/IB/332) showing the election of the United States.)**< If the parent international application was not copending (i.e., abandoned or withdrawn), benefit under 35 U.S.C. 120 is not possible."

***Drawings***

2. The drawings are objected to because they should include word labels on the various elements, not just the reference numbers in order to make them easier to understand without having to go back and forth between the specification and the drawings. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-15 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by the Universal Serial Bus Specification, Revision 1.1 (hereafter the USB spec).

At the outset it is noted that the USB spec revision 1.1 has a date on it of September 28, 1998. While this date is less than 1 year before applicant's foreign priority date, applicant has not yet perfected foreign priority and the art is being applied under 35 USC §102(b). This revision of the USB spec would still qualify as art under 35 USC §102(a) even after perfection of priority.

As per claim 1, the USB spec shows an industrial control unit (page 23, fig. 4-4 PC); and industrial control panel (monitor); and a communication link (USB link connecting the host/hub to the monitor/hub), wherein the industrial control panel comprises a plurality of functional units each with a USB controller and an integrated USB hub to connect the USB controllers to their functional units, and the control panel is connected to the industrial control unit via the communication link (fig.4-4, wherein the other functional units are connected via USB interfaces to the USB hub in the monitor unit and the control unit and control panel are connected via the communication link). The USB spec shows all of the elements recited in claim 1.

As for claim 2, the argument for claim 1 applies. The USB spec also shows that the industrial control unit comprises a USB interface and the communication link is a USB line connected to the USB interface (fig.4-4). The USB spec shows all of the elements recited in claim 2.

As for claim 3, the argument for claim 1 applies. The USB spec also shows that the functional units are input and output components (fig. 4-4). The USB spec shows all of the elements recited in claim 3.

As for claim 4, the argument for claim 3 applies. The USB spec also shows that the functional units are selected from a group comprising a keyboard, touch screen input, status display, a key display, a touch pad, a roller ball and a piezo pad (fig. 4-4). The USB spec shows all of the elements recited in claim 4.

As for claim 5, the argument for claim 1 applies. The USB spec also shows that the functional units comprise a communication interface operable to connect additional control devices and output devices (fig. 4-4). The USB spec shows all of the elements recited in claim 5.

As for claim 6, the argument for claim 1 applies. The USB spec also shows a line length of the communication link is greater than 5 meters (inherent in USB as evidenced at least by the Bassak article cited by applicant which makes reference to 30m line lengths). The USB spec shows all of the elements recited in claim 6.

As for claim 7, the argument for claim 1 applies. The USB spec also shows that the USB hub is connected to the control unit via a two-wire connection (inherent in USB). The USB spec shows all of the elements recited in claim 7.

As for claim 8, the argument for claim 1 applies. The USB spec also shows an additional USB hub (KBD/hub) assigned to the control panel and being connected to the functional units of the control panel by a first USB line, and connected to the functional units of at least one additional control panel via a second USB line and connected to the industrial control unit via a third USB line (fig.4-4). The USB spec shows all of the elements recited in claim 8.

As for claim 9, the argument for claim 8 applies. The USB spec also shows that the additional USB hub is physically integrated into the control panel (fig. 4-4). The USB spec shows all of the elements recited in claim 9.

As per claim 10, the USB spec shows a plurality of functional units each associated with a respective USB controller; and an integrated USB hub operable to interconnect the USB controllers of the functional units wherein the industrial control panel is connected to a secondary device via a communication link operably connected to the hub (fig.4-4). The USB spec shows all of the elements recited in claim 10.

As for claim 11, the argument for claim 10 applies. The USB spec also shows that the functional units are input and output components (fig. 4-4). The USB spec shows all of the elements recited in claim 11.

As for claim 12, the argument for claim 11 applies. The USB spec also shows that the functional units are selected from a group comprising a keyboard, touch screen input, status display, a key display, a touch pad, a roller ball and a piezo pad (fig. 4-4). The USB spec shows all of the elements recited in claim 12.

As for claim 13, the argument for claim 10 applies. The USB spec also shows that the functional units comprise a communication interface operable to connect additional control devices and output devices (fig. 4-4). The USB spec shows all of the elements recited in claim 13.

As per claim 14, the USB spec shows providing an industrial control unit (PC host/hub); providing an industrial control panel having a plurality of function units each having a controller (monitor hub); and operably connecting the control unit to each of the functional units via a USB hub having a panel connection with a corresponding connection of each functional unit and a control unit connection for sending or receiving control signals to the control unit (fig.4-4,

wherein the hub in the monitor is connected to the host control unit via a USB line and the hub is coupled to the functional units via panel connections). The USB spec shows all of the steps recited in claim 14.

As for claim 15, the argument for claim 13 applies. The USB spec also shows providing a front USB interface device; providing an external device; operably connecting the external device to the USB hub through the front USB interface; and sending control or data signals to the external device from the control unit via the hub and the front interface (fig.4-4). The USB spec shows all of the steps recited in claim 15.

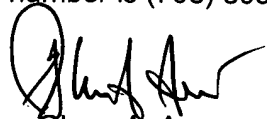
### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The other cited references show USB systems.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Glenn A. Auve whose telephone number is (703) 305-9638. The examiner can normally be reached on M-Th 8:00 AM-5:30 PM, every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on (703) 305-4815. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.



Glenn A. Auve  
Primary Examiner  
Art Unit 2111